

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 8. (Cancelled)

9. (Previously Presented): A method for providing a continuously variable clean dry air (CDA) flow in a semiconductor processor for substrate processing, comprising the steps of:

sensing temperature measurements at selected points;

proportionally adjusting a continuously variable CDA flow based upon the sensed temperature measurements; and

maintaining a predefined temperature inside a dome of the semiconductor processor during the time that the processor is processing substrates and when substrate processing is idle.

10. (Previously Presented): The method of Claim 9 further comprising the steps of:

maintaining a supply of heat comprising the continuously variable CDA flow at the predefined temperature.

11. (Previously Presented): The method of Claim 9 further comprising the steps of: utilizing a heat exchanger to regulate the amount of heat provided to a chamber surface of the semiconductor processor.

12. (Previously Presented): The method of Claim 9 further comprising the steps of: utilizing one or more temperature sensors and a CDA flow controller for controlling upward and downward fluctuations from the predefined temperature of the dome of the semiconductor processor.

13. (Previously Presented): The method of Claim 9 further comprising the steps of: utilizing one or more temperature sensors and a CDA flow controller for controlling upward and downward fluctuations in the heat provided to the dome of the semiconductor processor.

14. (Previously Presented): The method of Claim 9 further comprising the steps of: maintaining a supply of air comprising the continuously variable CDA flow at a predefined quantity of heat provided to the dome of the semiconductor processor.

15. (Currently Amended): A method for semiconductor processing, comprising the steps of: providing a domed process chamber having a support, a process gas distributor, and an exhaust; and

continuously varying a clean dry air (CDA) flow responsive to temperatures changes in the domed process chamber, such that a dome temperature is stabilized in accordance with a preset temperature during a semiconductor manufacturing process and when processing is idle.

16. (Previously Presented): The method of Claim 15, further comprising: driving an antenna of a plasma reactor chamber by RF energy inductively coupled inside the domed process chamber.

17. (Previously Presented): The method of Claim 16, further comprising:

generating a low energy plasma by the antenna for etching metals, dielectrics and semiconductor materials.

18. (Previously Presented): The method of Claim 16 further comprising:

applying an auxiliary RF bias energy to a wafer support cathode to control a cathode sheath voltage and the ion energy independent of a plasma density in the plasma reactor chamber.

19. (Previously Presented): The method of Claim 15 further comprising:

idling the semiconductor manufacturing process.